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Chapter 1 Introduction

Convert your computer system into a real multimedia entertainment center with **AVerMedia UltraTV Media Center™ series**! Now you can watch television, video conference, and capture still images and video on your PC. If you purchased **UltraTV Media Center PCI 550 card** with FM capability, you can also listen to FM radio.

Surely, you'll never miss your favorite ball games, soaps or game shows anymore, because **AVerMedia UltraTV Media Center PCI 500/550** comes with a scheduler where you can configure to show or record your preset TV programs or FM radio broadcasts whenever they are aired.

Video Conferencing on your PC

With your own desktop camera, microphone, modem and video conferencing software, you can use **AVerMedia UltraTV** Media Center PCI 500/550 to do video conferencing. The quality of seeing and talking to long distance friends is now sharp, clear and at a fraction of the cost.

Image and Video Capture

You can also capture still images and full motion video. Record television programs or other clips in a snap.

Chapter 2 Introducing the UltraTV Application

The **UltraTV** application allows you to watch TV or video, record still or motion video, and listen to FM radio on your PC while you work on your computer.

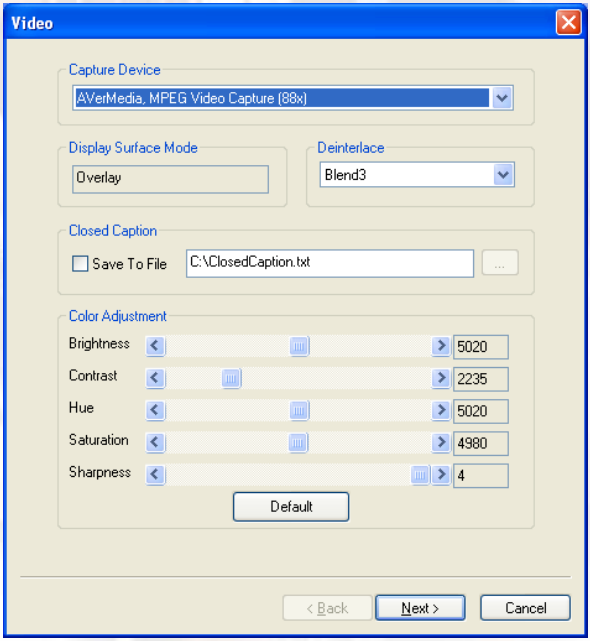
Launching the UltraTV application

Run the **UltraTV** application from the Programs menu.

To run the application, click **Start**, select **Programs**, choose **UltraTV** and then click **UltraTV**. Another way is to double-click the **UltraTV** program icon on the desktop. Or, double-click the **Quick TV** launcher located at the lower right corner of the screen.

If you are running the application for the first time, a configuration dialog box will appear, prompting you to adjust settings for your **AVerMedia UltraTV Media Center™ PCI 500 / UltraTV Media Center™ PCI 550** card.

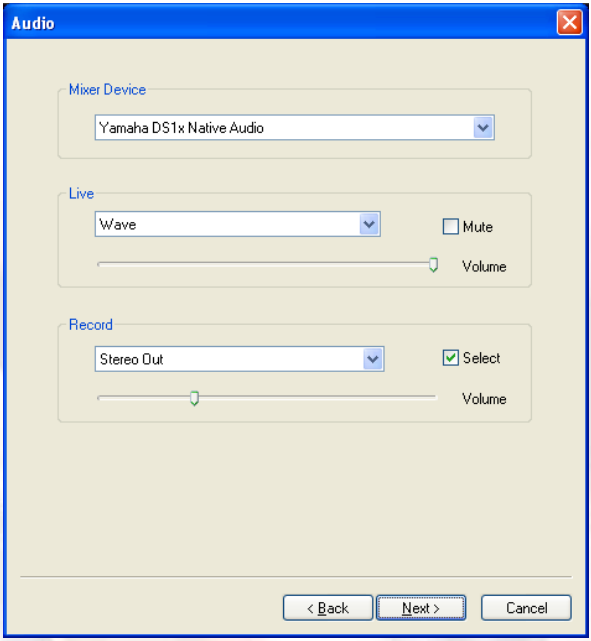
The configuration dialog box first displays the **Video** tab where you are prompted to choose a video capture device driver.



Your **UltraTV** card's video capture driver is already selected by default. If you have other TV tuner or capture devices installed in your system, you can switch to another driver by selecting it from the drop-down list. To adjust TV display settings such as brightness and contrast, drag the

slider bars until you get the best display results. If there is closed caption on the TV programs, you can enable saving of closed caption.

When you click **Next**, the **Audio** tab is displayed.

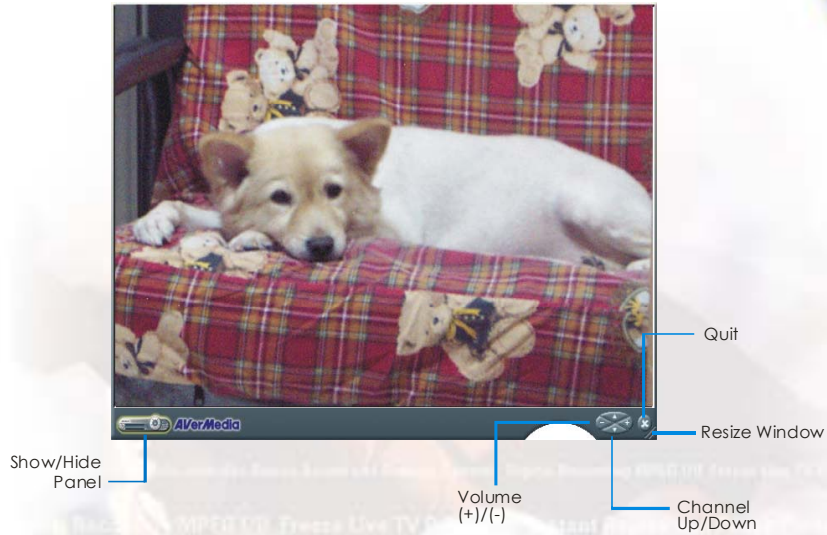


YOU NEED TO CHOOSE THE *APPROPRIATE* AUDIO OPTION respectively in the **Live** and **Record** section; otherwise, NO sound can be heard or recorded when you are watching or conducting the recording of TV/video programs.

When you click **Next**, the **Channel** tab is displayed. If this is your first time using the UltraTV application, you need to search for all available TV channels in your area. Select the **Ant.** option to search only for antenna TV channels, or select **CATV** to scan for cable channels. Then click the **Channel Scan** button to start searching and memorizing channels. (Refer to the section titled *Memorizing TV Channels* for more details.)

Introducing the User Interface

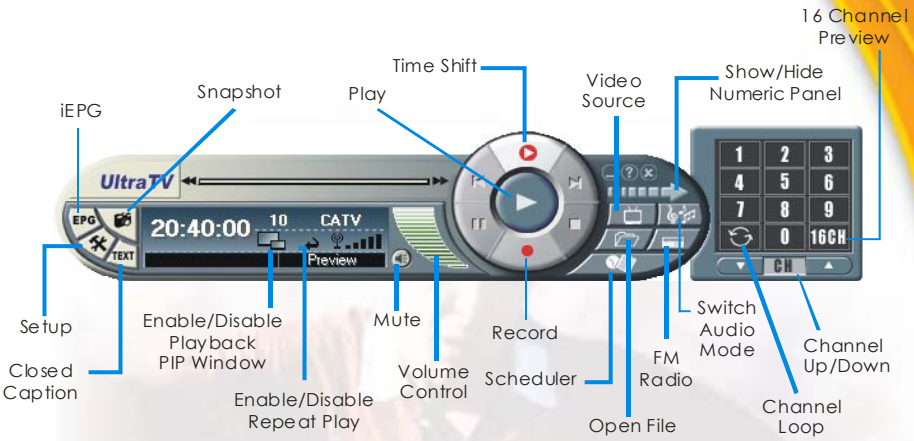
The **TV monitor** allows you to watch live TV or video.



The **Control Panel** provides button controls for selecting channels, changing between TV and external video source, capturing images, and more. It has a panel display that shows the current active video source (e.g. TV, Composite or S-Video), channel number, and other indicators.

To display the **Control Panel**, click the button located at the lower left corner of the TV Monitor.

The Control Panel



The table below describes what the button controls on the Control Panel are used for.

BUTTON	FUNCTION	BUTTON	FUNCTION
iEPG	Links to an interactive content guide on a Web site (such as TitanTV.com in the U.S.)	Video Source	Change to view TV or video from a Composite or S-Video source.
Setup	Allows you to: * Change the look of the user interface. * Fine tune TV display and audio settings. * Tune into air/cable TV. * Autoscan channels. * Lock/unlock channel.	Open File	Create a playlist of video files to playback.

BUTTON	FUNCTION	BUTTON	FUNCTION
	* Create channel groups. * Configure snapshot settings. * Customize recording settings for the TimeShift function.		
Closed Caption	Display closed caption.	Scheduler	Launch the Scheduler application.
Enable/Disable Playback PIP window	Playback recorded video while watching TV in a picture-in-picture window. (Create a playlist first by clicking the **Open File** button.)	Show/Hide Numeric Panel	Toggle between displaying or hiding the Numeric Panel.
Enable/Disable Repeat Play	Continuously play back the files in the playlist.	Switch Audio Mode	Choose between the available types of audio.
Mute	Turn off the sound.	FM Radio	Switch to listen to FM radio.
Volume Control	Drag your mouse up/down to increase/decrease the volume level.	16 Channel Preview	Display 16 consecutive TV channels on the TV Monitor window.
Record	Record the current TV show.	Channel Loop	Return to previously accessed channel.
Time Shift	Performs background recording of the live TV program. This function lets you view the recorded parts, while at the same time, recording is in progress.	Channel Up/Down	Go to the next upper or lower active channel.
Snapshot	Capture a single image or a sequence of images.	Play	Play back recorded video files.

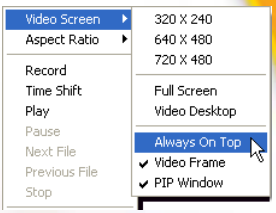
Resizing the TV Monitor Window

To enlarge or reduce the size of the TV Monitor window, click and drag the lower right edge of the window.

Double-click the TV Monitor window to display it in full screen.

When in full screen mode, click or double-click anywhere on the screen to revert to the normal TV window size.

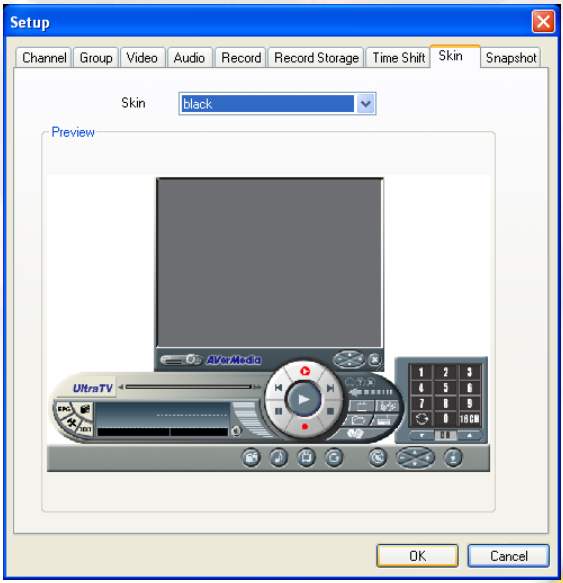
To make the TV Monitor window float over the top of other program windows, right-click on the TV Monitor, choose **Video Screen** and make sure **Always on Top** is checked.



Changing Skins

If you want to change the look and appearance of the TV Monitor and Control Panel, do the following:

1. Click the **Setup** button .
2. In the S*etup* dialog box, click the **Skin** tab.
3. From the *Skin* drop-down list, select the design you prefer, then click **OK**.



Chapter 3 TV

Selecting Between TV Signals (antenna/cable) or Channel Groups

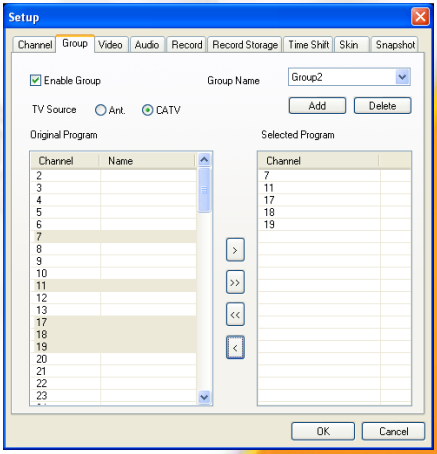
Click the **Setup** button then click the **Channel** tab to choose whether to watch antenna TV (**Ant.**) or cable (**CATV**). If you have added one or more channel groups, you can also select a group. (Refer to the section titled *Adding and Deleting Channel Groups* for more details.)

Adding and Deleting Channel Groups

Selecting a channel group allows you to switch between TV channels of the selected group when using the **Channel Up/Down** button. If you want to add or delete a channel group, do the following:

To add a new channel group:

1. Click the **Setup** button . In the S*etup* dialog box, click the **Group** tab.
2. Select the **Enable Group** option. The *Add Group Name* dialog box will then appear.
3. Type in a group name and click **OK**.
4. Choose between **Ant.** (for antenna) or **CATV** (for cable).
5. Available channels will then be listed in the *Channel* column under the **Original Program** section.



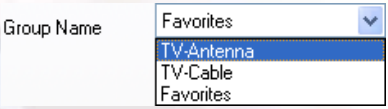
Shift+click or Ctrl+click channels from the list to select your own channel line up.

Then, click to add your selection to the *Channel* column under the **Selected Program** section.

6. To add more groups, click **Add** and repeat steps 3 to 6.

To delete a channel group:

1. Click the **Setup** button . In the S*etup* dialog box, click the **Group** tab.
2. From the *Group Name* drop-down list, select the name of the group you want to remove.



3. Click **Delete** to remove the selected group.

Memorizing TV Channels

Auto-scan will search and memorize all available channels in your area. In the **Channel** tab of the *Setup* dialog box, all scanned and memorized channels are check marked. If you haven't done channel scanning when you first started using the application, simply follow the auto-scan procedure below. (Refer to the section titled *Skipping Unwanted Channels* for more detailed information to exclude selected channels.)

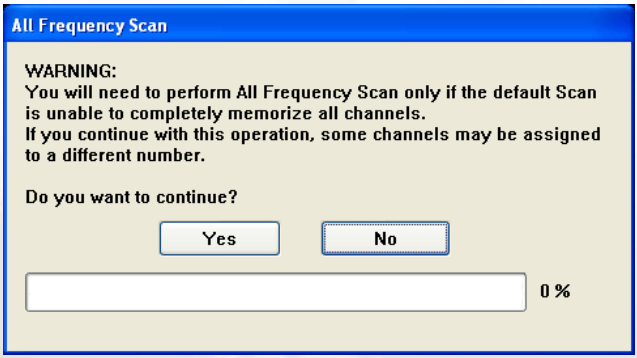
To auto-scan TV channels:

1. Click the **Setup** button and click the **Channel** tab.
2. In the *Video Source* drop-down list, make sure the **TV** option is selected. Then select **Ant.** to search for antenna channels or select **CATV** to scan for cable channels.
3. From the *Country* drop-down list, choose your region.
4. Click **Channel Scan** to start the searching process.

   The application has a default frequency table. When you click **Channel Scan**, the application will use the frequencies in this table and search for active channels. Active channels will then be memorized by the application.
5. You can terminate the searching process anytime. Just click **Stop**.

6. Check and verify that you can access all the TV channels. (Refer to the section titled *Selecting a TV Channel* for more detailed information regarding channels access.)

7. If there are channels missing from the channel memory, click **All Frequency Scan** and then repeat the auto-scan. The following message will appear:



8. Click **Yes** to start all frequency auto-scan. The application will then scan frequencies starting from 54 MHz to over 800 MHz, increasing by 250 KHz at a time. The application will check these frequencies for active channels, memorizing those that are.

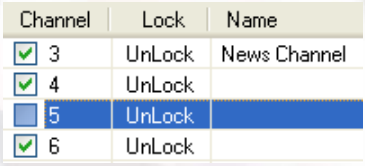
   Wait for the application to finish the all channel scan process or in the *All Frequency Scan* dialog box, click **Stop** to terminate the searching process.

   When auto-scan stops the application will return to the previously selected channel.

Skipping Unwanted Channels

If you want to exclude undesirable channels from your channel list, do the following:

1. Click the **Setup** button and click the **Channel** tab.
2. In the *Setup* dialog box, *Channel* column, click the unwanted channels. The check mark will be removed, indicating that the channels will be excluded from your channel list and that you won't be able to access or watch them through the **Channel Up/Down** button.



Selecting a TV Channel

There are three ways of switching between TV channels:

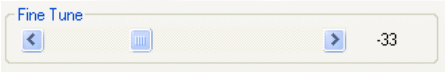
- Click the **Channel Up/Down** buttons repeatedly until you reach your desired channel.
- Click to open the *Numeric Panel* (as shown to the right). Then click on the **Numeric buttons** to get your desired channel number.

OR,

- Click the **Setup** button and click the **Channel** tab.

  Under the *Channel* list, simply click on the desired channel.

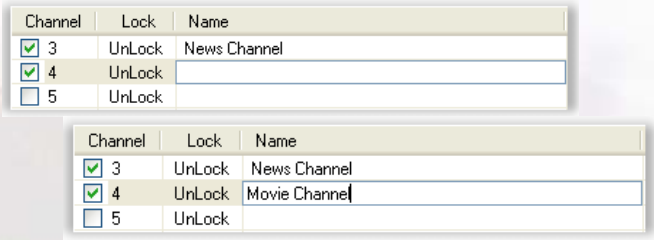
  You will need to perform fine-tuning only if the reception of the selected channel is not clear. Adjust the **Fine Tune** slider to get a clearer TV picture.



Specifying a Channel Name or Description

To assign a channel name or specify a description:

1. Click the **Setup** button and click the **Channel** tab.
2. Under the *Name* column, double-click the text box of the channel you want to assign a name or description.
3. Type in the channel name or description, then press **Enter**.

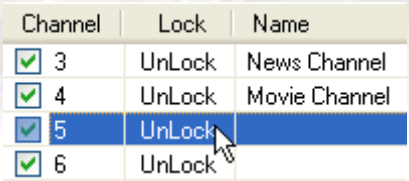


Locking and Unlocking a TV Channel

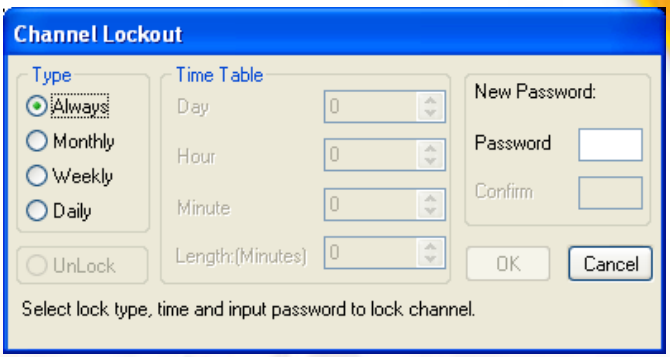
You may lock out certain TV channels (e.g. adult channels) if you want to prevent others from watching them.

To lock a TV channel:

1. Click the **Setup** button and click the **Channel** tab.
2. Under the *Lock* column, double-click the "UnLock" item of a TV channel that you want to be locked.



3. The *Channel Lockout* dialog box will then appear.



4. Choose the lock **Type**, that is, how often you would like to lock out the TV channel. There are four types to choose from:
   - Choose **Always** if you want to lock out the TV channel all the time.
   - Choose **Monthly** to lock out the channel once a month, at a preset day.
   - Choose **Weekly** to lock out the channel once a week, at a preset day and time.
   - Choose **Daily** to lock out the channel everyday at a preset time.

5. If you selected **Monthly**, **Weekly** or **Daily**, you will need to set the **Time Table**:
   - Set the **Day** of the month or week for when to lock out the channel (only if you selected **Monthly** or **Weekly**).
   - Choose the time to lock out the channel by adjusting the **Hour** and **Minute** settings appropriately.
   - Set the **Length** of time (in units of minutes), that is, how long the TV channel will be locked out.

6. Type a **Password** to use for unlocking the TV channel in the future.

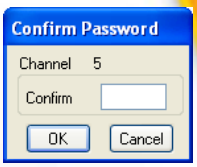
7. Type the same password again to confirm.

8. Click **OK** to accept the new settings, or click **Cancel** to revert back to the original settings.

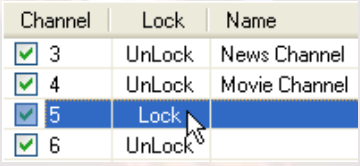
To unlock a TV channel:

1. Click the **Setup** button and click the **Channel** tab.

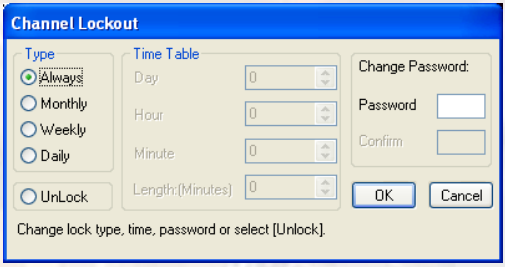
2. From the channel list, click the locked channel. The *Confirm Password* dialog box will then appear. (See figure at the right.) In the *Confirm* text box, type in the password for accessing the channel and click **OK**.



3. To unlock that channel, under the *Lock* column, double-click the "Lock" item.



4. The *Channel Lockout* dialog box will appear:



5. Select **Unlock**, then click **OK**.

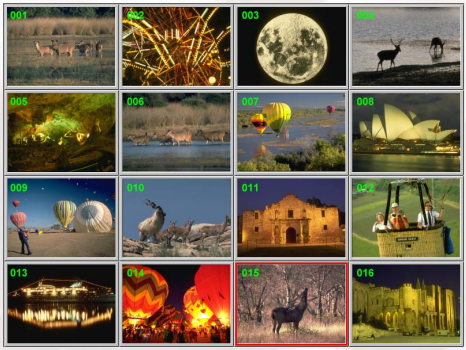
Notes:

- You can use alphabetical and/or numeric digits as your password.
- It is important to remember your password. You won't be able to unlock a channel or change the password without your current password. If you forget your password, you must reinstall the application.

Adjusting Volume

On the TV Control Panel, click and drag your mouse over the **Volume** meter to increase or decrease the volume level. You can also press the + and – keys to adjust the volume.

16-Channel Preview



The 16-channel preview function can display 16 TV channels on-screen at the same time. You can see clearly which TV programs are currently showing on these channels.

To preview the channels:

1. Click the **16 Channel Preview** button 16CH .
2. The screen will be gradually filled up with 16 TV channels, starting from the currently selected channel.
3. Click a channel to view it only and freeze the other channels.
4. To display a channel on the TV Monitor window, select any one of the 16 channels on-screen and double-click the left mouse button on that channel, or use the arrow ↑,↓, ←, or → buttons on your keyboard then press **Enter**. You will then be tuned in to that channel. (Or, Click the right mouse button or press **ESC** to return to the originally selected TV channel.)

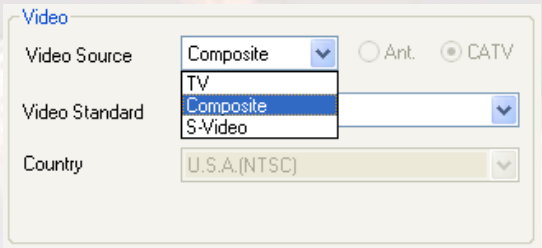
Selecting Between TV and External Video

If you want to watch video from an external source such as a VCR or camcorder, click the **Change Video Source** button to switch between watching TV, Composite video source, and S-Video source.

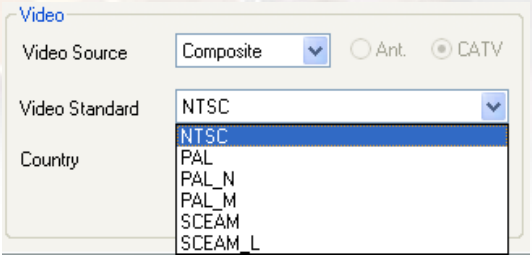
Setting the Video Format of External Video

To set the video format used by the external video source, do the following:

1. Click the **Setup** button and click the **Channel** tab.
2. From the *Video Source* drop-down list, choose the type of external source: Composite or S-Video.



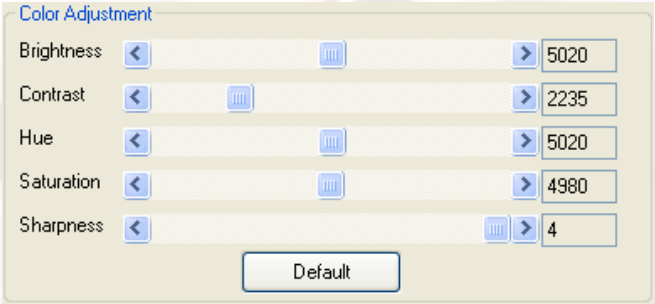
3. From the *Video Standard* drop-down list, select the proper video format.



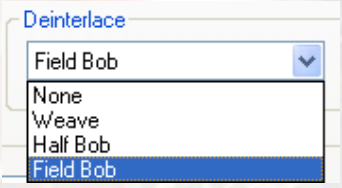
Fine tuning Color and Display Quality

If the color or picture quality of the TV/video display needs to be adjusted, click the **Setup** button and click the **Video** tab.

To adjust the color of the TV or video picture, adjust the **Brightness**, **Contrast**, **Hue**, and **Saturation** sliders until you get an accurate color. (If you change your mind and want to change back to the factory default settings, click **Default**.)



If the TV/video picture appears unclear or you see lines on the picture, select one of the options under the *Deinterlace* drop-down list. Try all the options to compare which of them will give you the best picture quality.



Chapter 4 Image Capture

While you watch live TV or video from your PC monitor, you can use the **UltraTV** application to capture images for your document, presentation or web page.

Before Capturing

Before you start capturing images, first set the destination folder for saving captured images.

Click the **Setup** button then click the **Snapshot** tab. Click ... to choose a folder where you want to save captured images.

Capturing a TV/ Video Image

To capture a still image, click the **Snapshot** button. The *Album* will then appear, displaying thumbnails of the captured image.

To capture another image, click **Snapshot** again. New thumbnails and pages will be added to the *Album* as you capture more images.

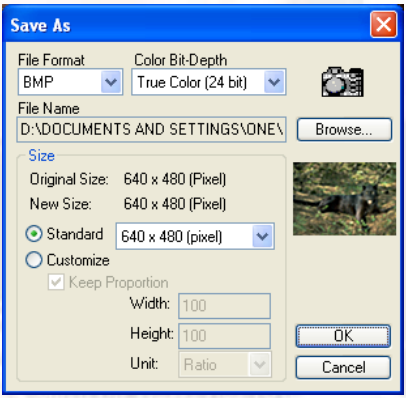
To display the captured image on your desktop:

1. Select the thumbnail of the desired image then click the **Desktop Wallpaper** button .

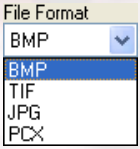
2. The selected image will be displayed as your wallpaper, the background of your desktop.

To save the captured image:

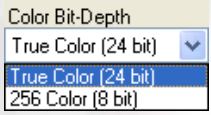
1. Select the thumbnail of the image then click the **Save As** button . The *Save As* dialog box will then appear.



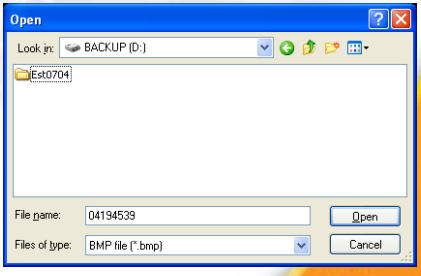
2. From the *File Format* drop-down menu, select the format for saving the captured image.



3. Choose the *Color* format.
   - Choose 24-bit to capture image in 16M colors.
   - Choose 8-bit to capture image in 256 colors.

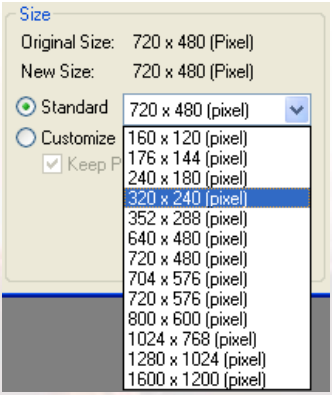


4. Click **Browse** to scan for folders and select a destination location for saving the image. Then specify a file name for saving the captured image.

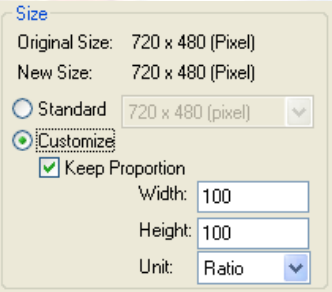


5. Choose the image size.

- In the *Size* section, select the **Standard** option and choose your desired image size from the drop-down list.



- If you want to set your own image size, select **Customize** and enter the image **Width** and **Height**. If you want to maintain relative width and height, select the **Keep Proportion** option. Choose a measurement unit from the **Unit** drop-down list. You can specify any image size you want. The maximum capture size is 1600×1200.

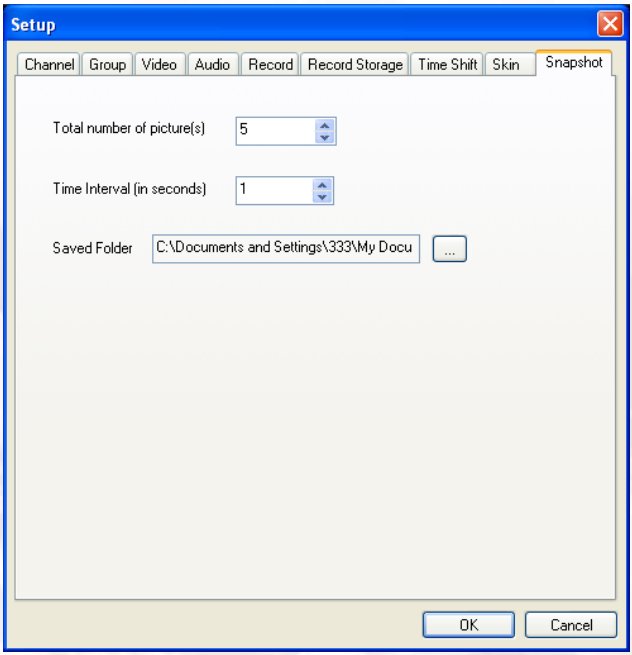


6. Click **OK** to save the image. Click **Cancel** if you do not want to save the image.

Multiple Image Sequence Capture

To capture a continuous sequence of images, do the following:

1. Click the **Setup** button then click the **Snapshot** tab.



2. In the *Total Number of Picture(s)* box, specify the number of images you want to capture.

3. In the *Time Interval (in seconds)* box, specify the interval between captures. For instance, if you specify 10 seconds, an image will be captured every 10 seconds.

4. Click **OK** to save the new settings. Click **Cancel** if you do not want to change the settings.

5. Click the **Snapshot** button to start capturing.

Chapter 5 Time Shift

The Time Shift function performs background recording of a TV program, and lets you return and watch any part of the recorded program. At the same time, the live TV program continues to be recorded and played back so you won't miss any part of the show. You can also advance forward to skip commercials or rewind to replay scenes one more time.

Time Shift Controls

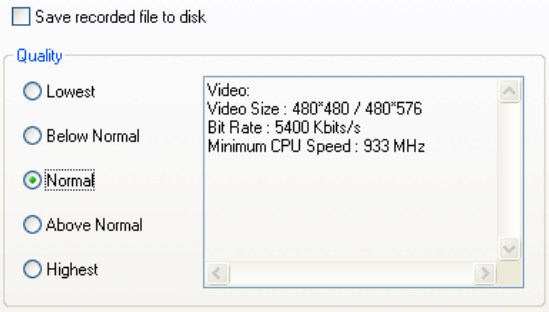
Use the following button controls in the Control Panel to start recording a live TV program, play back the program from where you left off, advance forward, rewind, and more.

Customizing Time Shift Settings

Before you start using the Time Shift function, first check its recording settings to see if they fit your needs.

To check and customize settings:

1. Click the **Setup** button then click the **Time Shift** tab. You will then see the following settings.



2. By default, Time Shift performs recording of the TV program by creating a temporary video file and deletes this file once you click the **Stop** button to switch off this function. If you want to save the video file, select the **Save recorded file to disk** option.

3. Select the video **Quality** that you want for the recorded program. When you click an option, details such as video size, bit rate, etc. will be displayed in the box at the right. The minimum CPU speed required will also be shown for your reference. Make sure that your computer's CPU performance is fast enough and meets the requirement.

4. If you choose to save TV recordings as video files in step 2, set a destination folder for saving the files. Click the **Record Storage** tab, and under **Saved Folder**, click [...] to choose a folder in which to save the video files.

5. Click **OK** to apply the new settings, or click **Cancel** to use the original settings.

Using the Time Shift Function

To pause the live TV program and then replay:

1. Click the **Time Shift** button . You can now leave your computer and let the application record the TV program.

2. When you're back and want to replay, use the **Playback Seek** slider bar to move back to the part where you left off. Click and drag the slider tab to the left until you see the part of the show where you were watching earlier, then release the mouse button to replay from there.

3. You can also click the **Backward** button ◀◀ to move backward in fixed intervals until you reach the part where you left off.

4. To advance forward and skip some parts of the recording (for example TV commercials), drag the slider tab to the right. You can also click the **Forward** button ▶▶ to move forward in fixed intervals.

5. To temporarily pause the playback, click the ▮▮ **Pause** button. Click the **Pause** button again to resume.

6. To return to real-time viewing of the live TV program, click the ■ **Stop** button. This switches off the Time Shift function and returns you to live TV.

Note: If the TV recording was saved as a video file in a specified folder, you can play it back anytime you want. Refer to *Chapter 6 DVR* to know more on how to open and play back recorded video files.

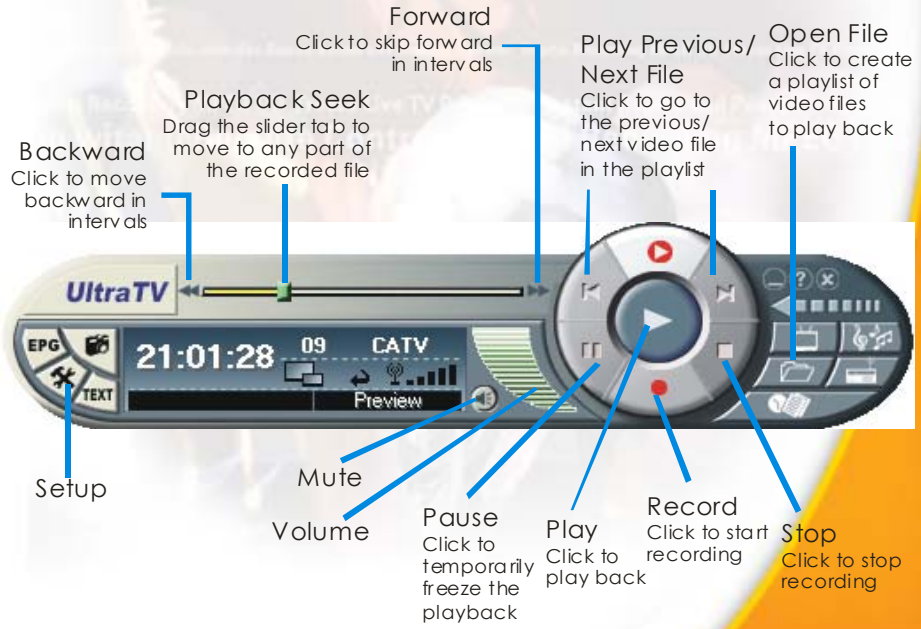
Chapter 6 DVR

You can use your computer as a digital video recorder, and record your favorite TV programs or capture video from an external source into your hard drive. Record programs or video in high-quality MPEG-2 file format. You can also save the recordings in VCD or DVD format for burning on discs.

When playing back a recorded file, you can view it individually or simultaneously play the recording while watching live TV in a picture-in-picture window.

DVR Controls

Use the following button controls for recording and video playback.



Recording Programs or Video

Select a TV channel that is showing the TV program that you want to record. Whereas to record video, click to switch to the Composite or S-Video source. Then follow the procedure below to record.

1. First, determine the length of recording you want to make and the destination folder where to save the recording. Click the **Setup** button and click the **Record Storage** tab. Then specify a **Duration** or choose the **Unlimited** recording option. Click to choose a destination folder. (Refer to the section titled *Setup* for more details.)

2. Next, determine the video file format to use for saving the recorded video files. Click the **Record** tab, then choose MPEG-2, VCD, or DVD format. (Refer to the section titled *Setup* for more details.)

3. Click the **Record** button to start recording the current TV program or video.

4. Click the **Stop** button to end the recording.

Playing the Recorded Programs or Video

Each TV program or video that you recorded will be saved as a video file in the assigned destination folder.

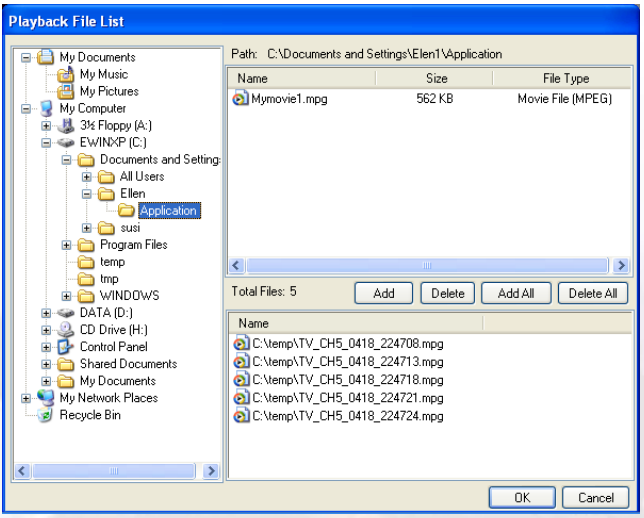
To play back the recorded video files:

- Click the **Play** button to play back.

OR,

- (1) Click the **Open File** button , then select **Open File List** to display the *Playback File List* window. All the recorded video files are listed at the bottom right pane of the *Playback File List* window. This is the default playlist of video files.

(2) To delete files from the playlist, select them from the list in the bottom right pane and click **Delete**, or click **Delete All** to delete all files in the playlist.



(3) To add more video files to the playlist, first navigate the *Folder Tree* on the left pane to find the folder that contains the desired video files. When you have located the folder, the video files will then be displayed on the top right pane. Select files that you want, then click **Add**, or click **Add All** to add all video files in the folder to the playlist.

(4) To start playback, click **OK**. The application will start playing each video file in the playlist. (To move to the previous or next video file in the playlist, click the ⏮ or ⏭ button.)

Picture-in-Picture Display

With the picture-in-picture window feature, you will be able to play back recorded video files, and at the same time, watch live TV.

If picture-in-picture window is disabled, you will see the ▭ icon on the Control Panel. Click this icon to enable the picture-in-picture window.

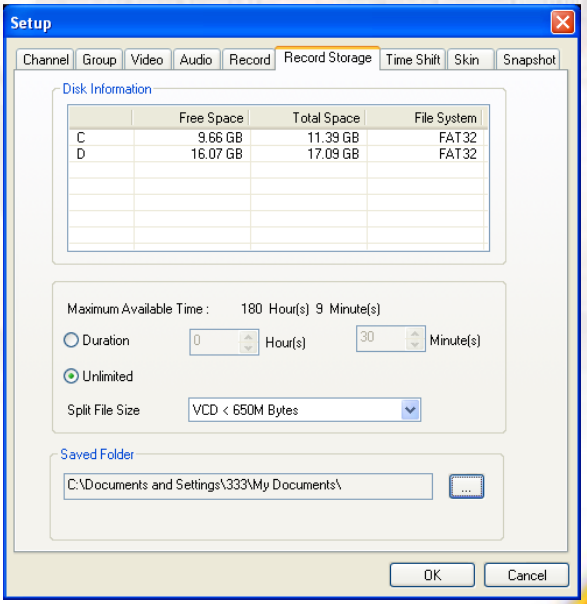
When you see the icon on the Control Panel, it means that picture-in-picture window is enabled. By default, you will be able to play back recorded video files on the main window, and at the same time, watch live TV on the smaller picture-in-picture window. If you want to switch the video playback to the picture-in-picture window and the live TV to the main window, just double-click the smaller window.

You can freely move the picture-in-picture window around the main window. Just drag it to the position you want on the main window.

Setup

The **Record Storage** and **Record** tabs in the *Setup* dialog box provide settings for customizing capture duration, file size, video format, and more.

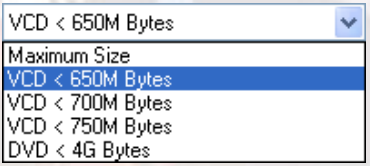
Record Storage Tab



Recording Duration and File Size

Specify the desired length of recording. Select **Duration** and enter the time length in number of hours and minutes. Otherwise, if you do not have any specific time length requirement, select the **Unlimited** option. The application will record the largest clip that your hard disk can accommodate.

If you will be recording programs or video for burning to discs such as VCD or DVD, select the appropriate video file size for the target disc capacity so that each video file will not exceed the limit. Choose the file size from the **Split File Size** drop-down list.

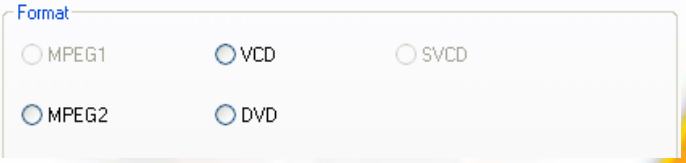


Destination Folder

Under **Saved Folder**, click the **Browse** button ... to choose a folder in which to save the recorded video files. (Video files will be named with default file names.)

Record Tab

Video Format and Video Standard



Under **Format**, select a video file format that you want to use for saving recorded programs or video. These are the available video formats:

- **MPEG-2**

  Videos compressed using MPEG-2 have extremely high quality pictures and full CD-quality sound. Choose MPEG-2 format for video files that are intended for DVD-ROM playback on a computer or if you want broadcast quality videos.

- **VCD**

  When you choose this format, the recorded video file will be saved in MPEG-1 format that is compliant with VCD standards. Standard VCD frame size and frame rate are 352 x 240 pixels at 29.97 fps for NTSC and 352 x 288 pixels at 25 fps for PAL.

- **DVD**

  When you choose this format, the recorded video file will be saved in MPEG-2 format that is compliant with DVD standards. Standard DVD frame size and frame rate are 720 x 480 pixels at 29.97 fps for NTSC and 720 x 576 at 25 fps for PAL.

The application automatically set the video standard for recorded video files based on the video system used by the current video source (selected in the **Channel** tab).

Record Audio Only

If you want to record the audio only from a TV program or video, you can choose either MP3 or WAV as the file format to use for saving the recorded audio.

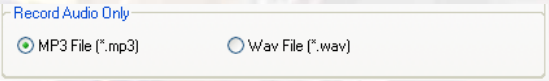
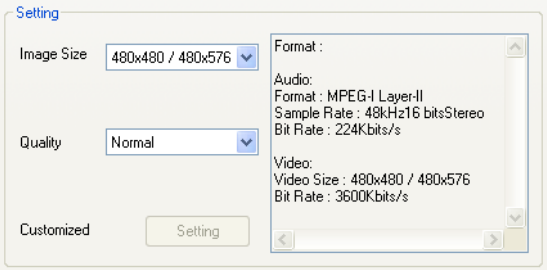


Image Size and Quality Settings



The **Image Size** and **Quality** settings are enabled for selection depending on what video file format you have chosen for your video files.

- **Image Size**

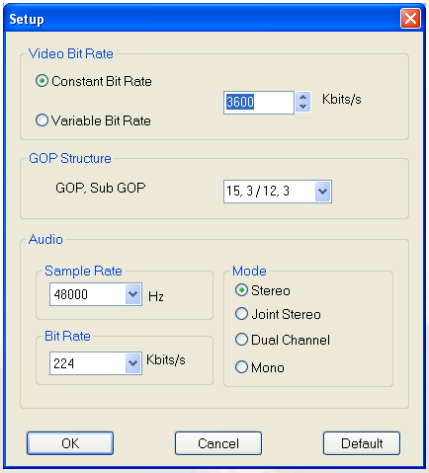
  Choose preset dimensions for your captured video from the drop-down list.

- **Quality**

  Select **Highest** quality to capture high quality video clips. This creates large files, especially when you are recording long clips. To have smaller file sizes, select other quality options.

  If you select the **Customized** option, the **Setting** button will be enabled. Click this button to customize advanced video and audio capture settings.

Customized Settings



- **Video and Audio Bit Rate**

  Set the desired video and audio capture bit rate. Higher rate produces better quality, but this will take up more space on your hard drive. If you plan to use the clip for the Web, the recommended settings are 300Kbps for video and 32Kbps for audio. For professional applications that demand best quality output, use 3000Kbps for video and 384Kbps for audio.

- **GOP (Group of Pictures) / Sub GOP**

  This refers to a series of one or more coded frames, it is intended to assist in random accessing and editing. The frames are composed of sequences of intra frames (I frames), predicted frames (P frames) and Bi-directional frames (B frames). I frames are typically located in front of the group of pictures these are pictures that are used as reference points in the GOP. P frames are encoded from the past frames (or picture) recording only the differences between the current frame and the reference frame. B frames are encoded relative to the I frame and P frame giving it the maximum amount of compression by only recording the

differences between those frames. B frames take the longest time to encode, followed by P frames and then by I frames. I frames consume the largest amount of space and produces the highest bit rate. I frames are also computationally demanding to decode, this is not an issue if the same machine is used for encoding since encoding is more computationally intensive than playback.

A smaller GOP value tends to produce videos that have better response to movement, since the I frames are closer together, but this would result in a lower compression rate. In encoding you can select different values for the GOP, listed below are types of GOP values and the frames they produce.

Example:

- GOP = 15; Sub_GOP = 3
  The GOP structure is I BBP BBP BBP BBP BB

- **Sample Rate**

  To convert an analog signal to digital, your computer takes measurements of the sound wave's amplitude (a sample) at particular points in time. The more samples the computer takes, the more information it obtains and thus, the closer it comes to capturing something close to the original sound. 44.1 Khz is CD quality sound and is the default setting.

- **Mode**

  You have four audio channel choices to choose from for MPEG 2: Stereo, Joint Stereo, Dual Channel, and Mono. To obtain high-fidelity and CD quality sound, use Joint Stereo.

Chapter 7 FM Radio

FM Radio Controls (AVerMedia UltraTV Media Center™ PCI 550 only)

Click the **FM Radio** button to listen to your favorite radio station programs.

Use the following button controls for selecting FM radio channels, adjusting volume, scanning FM channels, recording radio programs as MP3 or WAV files, and more.

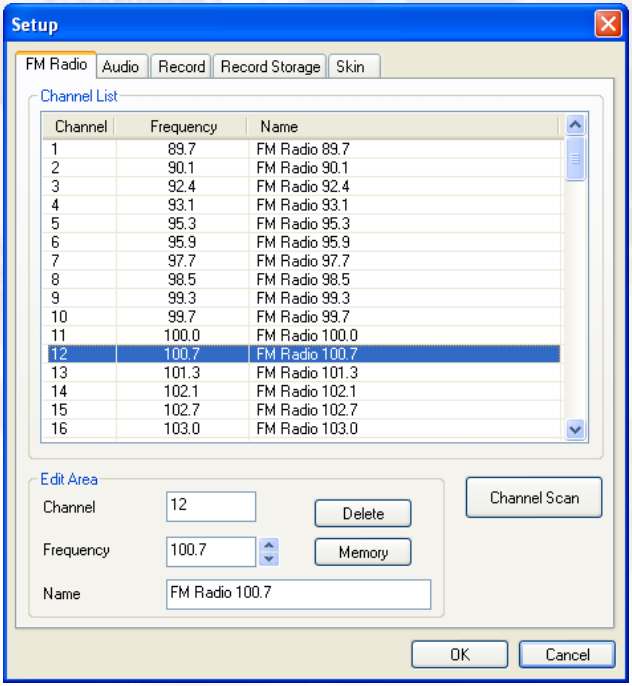
To change back to live TV, click the **Change Video Source** button.

How to Auto Scan FM Radio Channels

If this is your first time using FM radio, perform auto scan to search and memorize active FM radio stations in your area.

To auto scan FM radio stations:

1. Click the **Setup** button and click the **FM Radio** tab.
2. Click the **Channel Scan** button. All active channels will be automatically scanned and memorized. Up to 99 preset channels can be memorized.



Channel Versus Frequency Selection

You can tune to FM radio by channel or frequency.

By default, the Numeric Panel allows you to select memorized radio channels, as indicated by the **Channel** button CH on the panel.

You can switch to selecting radio frequencies by clicking the CH button. When you see the button change into the **Frequency** button FREQ, clicking on the number buttons on the Numeric Panel allows you to select radio frequencies.

Selecting a Channel

To select a channel:

1. Click to open the *Numeric Panel*.
2. There are a number of ways to select a channel:
   - Click on the **Numeric buttons** to select a channel.
   - Click the **Channel Up/Down** button until you reach your desired channel.

   OR,
   - Use the **numeric keys** on your keyboard to select a channel.

Selecting a Radio Frequency

To select a radio frequency:

1. Click the **Channel** button CH. The button then changes to the **Frequency** button FREQ.
2. There are a number of ways to select a radio frequency:
   - Click the **Numeric buttons** on the Numeric Panel.
   - Click the **Tuning (-)/(+)** button to increase/decrease the radio frequency by 0.1 MHz.

   OR,

- Use the **numeric keys** on your keyboard to enter a radio frequency.

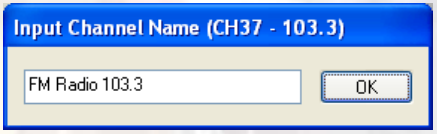
You can save the selected radio frequency to a channel. Refer to the section titled *Saving a Radio Frequency to a Channel* for details.

NOTE: When selecting a radio frequency, be sure that it is within the acceptable range of FM radio frequencies in your area. If you entered a frequency which is out of range, the **UltraTV** application will disregard this invalid frequency. The application will then automatically tune the FM radio back to the previous frequency.

Saving a Radio Frequency to a Channel

To assign a selected radio frequency to a channel:

3. First, select a channel. Refer to the section titled *Selecting a Channel* for details.
4. Now select a radio frequency. Refer to the section titled *Selecting a Radio Frequency* for details.
5. Click the **Memory** button. The *Input Channel Name* dialog box will then appear.
6. Enter a descriptive channel name and click **OK**.



Note: You can also click the **Setup** button and assign radio frequencies to each channel in the **FM Radio** tab. Enter the **Channel**, **Frequency** and channel **Name** in the provided text boxes, then click **Memory**.

Removing an FM Channel

To remove the FM radio channels that you don't want, do the following:

1. Click the **Setup** button and click the **FM Radio** tab.
2. Now select the undesired channel from the **Channel List**.
3. Click the **Delete** button.
4. To remove more channels, repeat steps 2~3.
5. Click **OK**.

Recording FM Radio Broadcast

FM radio broadcast can now be recorded to your hard disk in WAV or MP3 format.

To record an FM radio broadcast:

1. Specify audio recording settings. Refer to the section titled *Customizing Audio Recording Settings* for details.
2. Click the **Record** button .
3. Click the **Stop** button to end the recording.

Playing the Recorded Audio

To play back the recorded audio files:

- Click the **Play** button to play back.

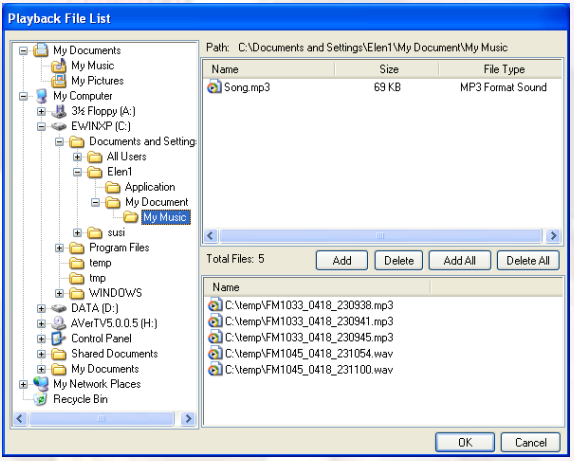
OR,

- (1) To play the recorded audio files one after another, click the **Open File** button to display the *Playback File List* window. All the recorded audio files are listed at the bottom

right pane of the *Playback File List* window. This is the default playlist of audio files.

(2) To delete files from the playlist, select them from the list in the bottom right pane and click **Delete**, or click Delete All to delete all files in the playlist.

(3) To add more audio files to the playlist, first navigate the *Folder Tree* on the left pane to find the folder that contains the desired audio files. When you have located the folder, the audio files will then be displayed on the top right pane. Select files that you want then click **Add**, or click **Add All** to add all the audio files in the folder to the playlist.



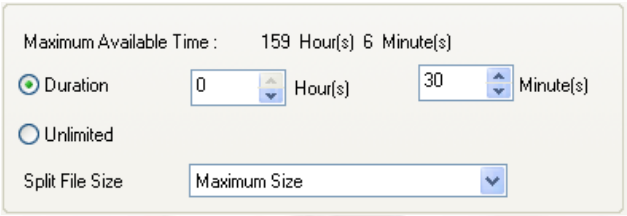
(4) To start playback, click **OK**. The application will start playing from the first to the last audio file in the playlist. (To move to the previous or next audio file in the playlist, click the or button.)

Customizing Audio Recording Settings

To customize audio recording settings:

1. Click the **Setup** button and click the **Record Storage** tab.

2. Determine the length of recording you want to make. Specify a **Duration** or choose the **Unlimited** recording option.

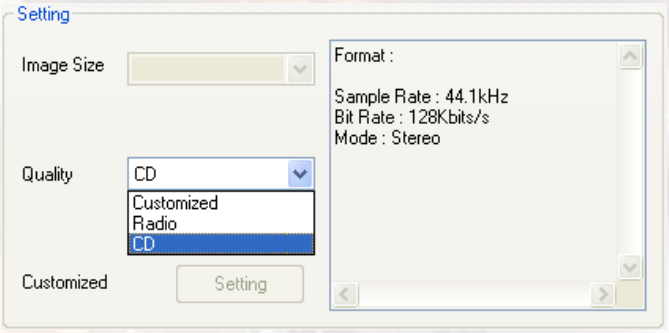


3. Click ... to choose a destination folder in which to save the recorded audio.

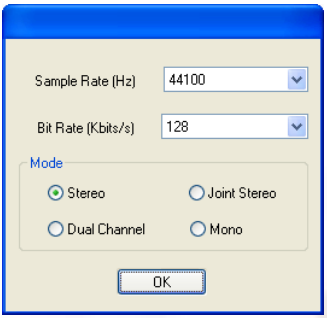
4. Next, click the **Record** tab.

5. Determine the audio file format to use for saving the recorded audio files. Choose either MP3 or WAV file format.

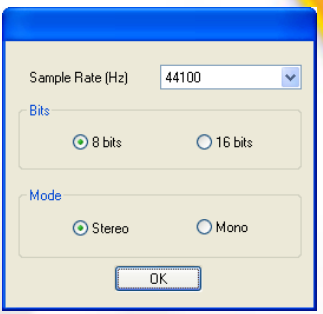
6. Choose the desired recording **Quality** from the drop-down list.



7. If you select the **Customized** option, click the **Setting** button to choose advanced settings for recording audio.



MP3 Format Setting



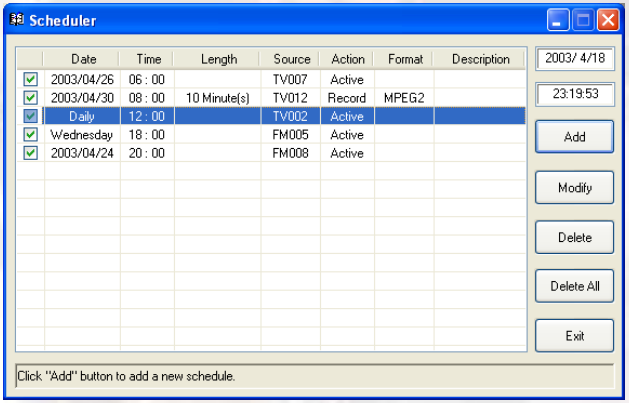
WAV Format Setting

Chapter 8 Scheduler

The **Scheduler** application allows you to create a list of preset schedules for watching and recording your favorite TV programs, and also for listening to and recording FM radio broadcast. You can set the day and time to turn on the TV or FM radio program and the length of recording.

To run this application, click **Scheduler** from the **UltraTV** program menu or right-click the **Quick TV** launcher located at the lower right corner of the screen then in the list menu, select **Scheduler**.

Preset schedules for tuning into live TV, FM radio broadcasts, as well as preset recording that you've added will be saved to the Scheduler application.



Schedule Listing

This displays a list of preset schedules you have created.

Modify

Select a preset schedule and click this button to make changes.

Delete / Delete All

Click this to delete selected / all schedules.

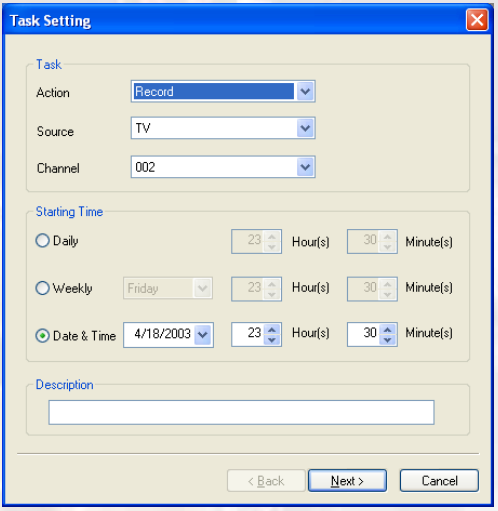
Exit

Click this to exit Scheduler.

Adding Schedules

To create a new schedule:

1. Click the **Add** button in the *Scheduler* dialog box.
2. The following dialog box will then appear:



3. From the *Action* drop-down list, select **Active** to watch a TV program or listen to an FM radio broadcast live. Otherwise, select **Record** to save a TV program, video, or radio broadcast for future viewing/listening.
4. From the *Source* drop-down list, select **TV**, **FM**, or an external video source.

5. In the *Channel* option, select the TV or FM radio channel where your favorite program is on. (If you chose an external video source, this option will be disabled.)

6. Set the schedule to tune in live or to perform recording. You can set the schedule on a **Daily** or **Weekly** basis, or on a specified **Date & Time**.

7. Type in a description, e.g., the name of a TV program or FM radio station, in the provided text box. Or, you may just leave it blank.

8. Click **Next**. The *Record Format* dialog box then appears.

9. If you have set a schedule for recording, choose the file format and customize settings for recording.

10. Click **Next**. The *Record Storage* dialog box then appears.

11. If you have set a schedule for recording, specify the length of recording. If you intend to burn the recorded files to VCD or DVD, choose whether to slice the file size to fit the target disc capacity in the **Split File Size** list box.

12. Click **Finish**.

Chapter 9 Hot Keys

Hot Key	Description	Function
UP/DOWN ARROW	Channel or Frequency Up/Down	Press to go to the next upper/lower TV channel, FM channel, or radio frequency.
Backspace	Channel Loop	Press to go to the previously accessed TV or FM channel.
NUMERIC KEYS	Channel or Frequency Selection	Use NUMERIC KEYS to directly enter the TV channel number, FM channel number, or radio frequency.
ESC	Stop or, Change back to Normal View	Stop (playback, recording, Time Shift, 16-channel preview, or channel scan). Or, change full screen back to normal view.
F1 (For UltraTV application)	Help	Open the on-line help.
F5	Full Screen	Show TV/Video in full screen.
F6	Display (OSD) information	Display On-Screen Display information.
+/-	Volume	Press to increase or decrease the volume level.

Hot Key	Description	Function
LEFT/ RIGHT ARROW	Rewind/ Fast Forward	Press to rewind or fast forward (for playback and Time Shift).
A	Audio Mode (TV only)	Choose between the available audio types.
D	Show/Hide TV Monitor Panel	Toggles between showing and hiding the panel on the TV monitor window.
F	Freeze	Freeze TV/video program.
M	Mute	Turn off/on the sound.
Ctrl + N	Play Next File	Play the next file in the playlist.
Ctrl + P	Play Previous File	Play the previous file in the playlist.
R	Record	Start recording.
P	Play / Pause	Play/pause (playback, recording of MP3 or WAV, Time Shift).
S	Snapshot	Capture an image (or a continuous sequence of images).
T	Time Shift	Enable the Time Shift function.
V	Change Video Source	Change between TV and the external video source.

Chapter 10 Setting Up your PC for Video Conferencing

Overview

This chapter briefly describes how to setup your computer for video conferencing. We will not go into detail about setting up a network environment nor about using video conferencing software.

For information on network settings, please refer to the Windows® manual. For details on video conferencing, please refer to the video conferencing software manual.

How to Setup UltraTV for Video Conferencing

In order to use the **AVerMedia UltraTV Media Center™ PCI 500 / UltraTV Media Center™ PCI 550** card for video conferencing, do the following:

1. Make sure the **AVerMedia UltraTV Media Center™ PCI** card is properly mounted into your PC.
2. Make sure you have a sound card in your system. Then, connect a microphone to the *microphone input* port of the sound card.
3. Connect a pair of external speakers to your sound card.
4. Connect a 28.8Kbps or faster modem to your PC.
5. Connect a camcorder or desktop camera to the **AVerMedia UltraTV Media Center™** "VIDEO" or "S-VIDEO" port depending on the type of input.
6. Start Windows®.

7. For Internet video conferencing:

   - If you still do not have access to the Internet, sign up for an Internet account from your local service provider.
   - Go to the **Control Panel** and double-click the **Network Connections** icon.
   - Double-click on the network icon that you use to connect to the internet.
   - Choose **General** tab, and click the **Properties** button.
   - Check and verify that the internet protocol "TCP/IP" is listed.
   - If TCP/IP is not listed, click the **Install** button. Double-click **Protocol** to select **TCP/IP** and then click **OK**.
   - Properly set up the TCP/IP environment. Click **TCP/IP**, then click **Properties** and provide all necessary information, e.g., your user name, IP address, and more.

8. Install the video conferencing software. Refer to the software manual for details.